

CLAIMS

1. An organic molecule to which there is covalently bonded a sialyl-Le^x determinant and a sulfated determinant, at least one of these determinants being positioned at a non-naturally occurring site on said molecule.
2. The organic molecule of claim 1, wherein said molecule contains multiple sialyl-Le^x determinants or multiple sulfated determinants.
3. The organic molecule of claim 1, wherein said molecule is soluble.
4. The organic molecule of claim 1, wherein said sulfated determinant is attached to a sequence consisting essentially of amino acids 21-57 of Fig. 8A.
5. The organic molecule of claim 4, wherein said sulfated determinant is attached to a sequence consisting essentially of amino acids 38-57 of Fig. 8A.
6. The organic molecule of claim 1, wherein said sulfated determinant is attached to a sequence consisting essentially of TGDYYEDSYEDIS (SEQ ID NO: 15).
7. The organic molecule of claims 1 or 5, wherein said molecule comprises α_1 -acid glycoprotein (AGP).
8. The organic molecule of claims 1 or 5, wherein said molecule comprises an antibody molecule.

9. The organic molecule of claims 5 or 6, wherein said molecule further comprises at least one copy of a repeat sequence ATEAQTTPPA (SEQ ID NO: 1) or MATNSLETSTGTSGPPVT (SEQ ID NO: 2).

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10. A purified nucleic acid encoding an organic molecule of claim 1.

11. The purified nucleic acid of claim 10, wherein said nucleic acid further encodes α_1 -acid glycoprotein (AGP).

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12. The purified nucleic acid of claim 10, wherein said nucleic acid further encodes an antibody molecule.

13. A vector comprising the nucleic acid of claim 10.

14. A cell comprising the purified nucleic acid of claim 10.

15. A method of inhibiting the binding of a cell bearing a P-selectin protein to a molecule or cell bearing a sialyl-Le^x determinant and a sulfated determinant, said method comprising contacting said P-selectin protein-bearing cell with an organic molecule of claim 1.

16. The method of claim 15, wherein said organic molecule also inhibits the binding of a cell bearing an E-selectin protein to a molecule or cell bearing a sialyl-Le^x determinant.

17. A method of reducing inflammation in a mammal comprising administering to said mammal a therapeutically-effective amount of an organic molecule of claim 1.

18. A method for reducing or protecting a mammal against an extravasation-dependent adverse reaction, said method comprising administering to said mammal a therapeutically-effective amount of an organic molecule of claim 1.

19. The method of claim 18, wherein said extravasation-dependent adverse reaction is extravasation-dependent organ damage or clotting associated with adult respiratory distress syndrome, glomerular nephritis, or ischemic myocardial injury.

20. A method for reducing or protecting a mammal against an adverse immune reaction, said method comprising administering to said mammal a therapeutically-effective amount of an organic molecule of claim 1.

21. The method of claim 20, wherein said adverse immune reaction is induced by a microbial factor.

22. The method of claim 20, wherein said adverse immune reaction is induced by a host factor.

23. The method of claim 20, wherein said adverse immune reaction is septic shock or septicemia.

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